DEPARTMENT OF THE ARMY
HEADQUARTERS, WALTER REED ARMY MEDICAL CENTER
6900 Georgia Avenue, NW
Washington, DC 20307-5001

WRAMC Regulation 19 July 2002
No. 40-103

Medical Services

Comprehensive Pain Assessment and Management of Patients

1. History. This issue is the first printing of this publication.

2. Applicability. This regulation is applicable to all personnel in patient care settings at the Walter Reed Army Medical Center (WRAMC).

3. Purpose. This regulation establishes policies and procedures for the effective management of pain for patients at WRAMC.

4. References.

a. McMaffery,M., Pasero, C. Pain. Clinical Manual. 2nd edition. Mosby . St. Louis. 1999.
b. Comprehensive Accreditation Manual for Hospitals (CAMH), Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

5. Definitions.

a. **Acute pain** - relatively brief pain that subsides as healing takes place.
b. **Addiction** – a persistent pattern of dysfunctional drug use including loss of control over use despite adverse physiologic, psychological, and/or social consequences.
c. **Chronic pain** – pain that exists beyond an expected time for healing, typically six months or more.
d. **Comfort goal** - level of comfort established by the patient and/or family with the medical team, above which will trigger an analgesic dose increase, additional analgesic, or other pain relief intervention.
e. **Dependence** – a physiologic response resulting from chronic drug administration such that an abrupt cessation of the drug, results in drug-specific withdrawal symptoms.
f. **Epidural catheter** - a catheter placed into the epidural space for analgesia administration.
g. **Neuropathic pain** - pain initiated or caused by a primary lesion or dysfunction of the nervous system.
h. **Nociceptive pain** - pain stimuli from somatic and visceral structures; non-neuropathic pain.
i. **NSAID** - an acronym for nonsteroidal anti-inflammatory drug.
j. **Opioid** - refers to natural, semi-synthetic and synthetic drugs that relieve pain by binding to opioid receptors in the nervous system.
k. **Pain** - an unpleasant sensory and emotional experience associated with actual or potential tissue damage.
l. **Pain scales** - measures of pain intensity; commonly used pain scales are numerical (NRS), word descriptors (SDS), and faces.
m. **PCA -** patient-controlled analgesia is an interactive method of pain management that permits patients to treat their pain by self-administering doses of analgesics.
n. **Psuedo-addiction** – a pattern of addictive behavior in response to the under treatment of a patient's pain needs so that once appropriate pain management is achieved this behavior ceases.
o. **Tolerance**- a physiologic response to a medication that results in diminution of its effect over time.

6. Responsibilities

a. The Executive Committee of the Medical and Administrative Staff (ECMAS) is committed to pain management and supports the belief that patients should have their pain assessed and treated appropriately. Furthermore, patients should have an active role in their treatment. This commitment includes:

(1) Ensuring the organization ethics reflect that patients have the right to appropriate assessment and management of pain.

(2) Staff orientation and education to include:

(a) Importance of proper pain management.
(b) Methods for assessing pain.
(c) Recognition of the common barriers to effective pain management.
(d) Available options for effective pain management (pharmacological and non-pharmacological and their potential side effects.
(e) Methods for referring difficult pain management problems to appropriate specialists.

(3) Patient and family education.

(4) Systems and equipment that support state of the art pain management throughout the continuum of care.

(5) A process exists to monitor the appropriateness and effectiveness of pain management within the institution.

b. Physicians/Providers will:

(1) Appropriately assess all patients admitted to the hospital, observation units, ambulatory care units and clinics for the presence of pain.

(2) Help establish comfort goals for patients. (unless otherwise indicated, it is generally recommended to maintain a pain level of <4)

(3) Implement appropriate pain management strategies for patients, eliciting involvement from the patient, family members, as well as pain management experts as indicated.

(4) Reassess patients as needed to achieve an effective pain management plan.

(5) Document within the patient's medical record those aspects of care related to pain management.

c. Nurses will:

(1) Assess all patients admitted to the hospital, observation units, ambulatory care units and clinics for the presence of pain.

(2) Help establish comfort goals for patients. (unless otherwise indicated, it is generally recommended to maintain a pain level of <4)

(3) Be an integral part of the development and implementation of the pain management plan. Reassess patients as needed to achieve an effective pain management plan.

(4) Document within the patient's medical record those aspects of care related to pain management.

d. Pharmacists will:

(1) Provide education to providers and patients as to the proper use of medications utilized for pain management and their potential side effects, as well as drug/drug interactions.

(2) Deliver medications to nursing units as required.

(3) Alert providers/physicians as to potentially harmful or problematic drug interactions

(4) Provide a mechanism to allow for medication restrictions for individuals designated as using pain medications inappropriately.

(5) Insure clinicians follow Army Regulation 40-3, Appendix B regarding the proper accountability, procurement and wastage of medications.

(6) Be available for consultation and participation in multidisciplinary teams to help optimize medical management of pain.

e. Therapists will:

(1) Assess patient's pain level for participating in therapy and help establish comfort goals for patients.

(2) Educated providers and patients as needed in the use of non-pharmacological modalities for the relief of pain (ice, heat, electrical stimulation, etc.)

(3) Evaluate the effectiveness of the pain management plan and report back to the patient's provider when adequate pain management is not being achieved to ensure the patient's pain is not interfering with their participation in therapy.

(4) Ensure appropriate documentation of care is reflected in the patient's medical record.

(5) Participate in multidisciplinary teams as indicated for the assessment and treatment of patients with complex pain issues.

f. The Anesthesia Pain Service will:

(1) Provide special consultation service for the clinical departments and wards within WRAMC with regards to pain management.

(2) Provide state of the art pain management to include pharmacologic as well as procedures as indicated.

(3) Provide educational resources for other clinical departments within WRAMC concerning pain management.

(4) Help coordinate and participate in multidisciplinary evaluations and treatment plans as indicated for patients with complex pain issues.

g. The Physical Medicine and Rehabilitation Service will:

(1) Provide special consultation service for the clinical departments and wards within WRAMC with regards to pain management.

(2) Provide state of the art pain management to include pharmacologic as well as procedures as indicated.

(3) Provide educational resources for other clinical departments within WRAMC concerning pain management.

(4) Help coordinate and participate in multidisciplinary evaluations and treatment plans as indicated for patients with complex pain issues.

h. The Psychiatric Consult and Liaison Service (PCLS) will:

(1) Provide special consultation service for the clinical departments and wards within WRAMC with regards to pain management.

(2) Provide state of the art pain management to include both pharmacologic as well as non-pharmacologic treatment modalities.

(3) Participate in multidisciplinary evaluations and management plans as indicated for patients with complex pain issues.

7. Requirements. All patients seen at WRAMC have a right to appropriate pain assessment and management, which will be recognized by the institution and the health care providers within the institution. Patients, their families, and health care practitioners at WRAMC will be made aware of these rights. Established policies will be followed to ensure proper pain management is achieved throughout the institution at all levels of care throughout the continuum of care. Performance improvement methods will be used to monitor/measure the institution's pain management process and make improvements as indicated.

8. Policies and Procedures.

a. Patients Rights and Organizational Ethics: Patients will be notified of their rights and responsibilities as outlined in Appendix A by the following methods:

(1) WRAMC Patient Rights and Responsibilities signs.
(2) WRAMC Pain Management Patient Information Brochure. See Appendix P.

These principles will be reinforced by the WRAMC staff, who will be familiar with these rights and responsibilities and are committed to ensure every patient receives appropriate pain management.

b. Assessment of Patients for Pain: All patients evaluated at WRAMC both in the Inpatient and Ambulatory Care setting will be appropriately assessed for pain.

(1) Assessment Tool (Appendix B): The pain assessment scales to be used at WRAMC incorporate a 0-10 score and a Faces Scale to aide in the recording of pain in pediatric patients as well as those with language barriers. When indicated, foreign language assistance will be obtained through the Executive Office during duty hours or through the Administrative Officer of the Day (AOD) during non-duty hours. In addition, for those patients with significant cognitive impairment, clinicians will be familiar with non-verbal signs of patient discomfort as well as initiate a Speech Therapy Assessment for assisting with communication aides as indicated.

c. Care of Inpatients with Pain

(1) Patients admitted to WRAMC will have their pain assessed and annotated in the Nursing Admission Note as well as the Physician's History and Physical Exam note.

(2) Patients who have pain complaints will undergo a more comprehensive assessment of their pain, to include further investigation of the quality, location, duration, aggravating and elevating factors of their pain.

(a) The ward team will establish a treatment plan addressing the patient's pain, which will be documented in the patient's records.

(b) The patient's pain will be reassessed in the Nursing Shift Assessment note and monitored continuously within the CIS vitals section. These results will be readily available in CIS for the Physicians to further monitor or act on as indicated. All members of the health care team will have the ability to further highlight significant pain issues in the CIS Integrated Documentation Template.

(c) Physicians have the option as clinically indicated to set trigger pain intensity levels for which they should be notified. This should be clearly noted in the Physician's orders. (e.g. "Call HO for pain intensity greater than 5").

(d) Providers who have patients with challenging or complicated pain problems will consult the Anesthesia Pain Service, who will initiate a multidisciplinary evaluation as indicated.

(e) Prior to a patient's discharge from the hospital a pain management plan will be established for the patient to ensure appropriate continuity of care.

d. Care of Outpatients with Pain:

(1) All clinics should utilize the standard Assessment Tool (Appendix B) to assess patients for pain and intensity.

(2) A more in depth assessment for pain will be initiated at the providers' discretion as clinically indicated. However, it is generally recommended that pain intensities of 4 or greater warrant further investigation, such as location, duration, intensity, aggravating/elevating factors…etc.

(3) As indicated, the provider upon further discussion with the patient and/or his/her family should establish a pain management plan. This plan should be clearly documented in the patient's outpatient record.

(4) Because of the wide diversity and complexity of patients at WRAMC, each clinic should establish their own clinic standard operating procedure (S.O.P) in order to ensure all patients are being assessed for pain and managed appropriately.

(5) Clinics are not expected to resolve all pain issues during each patient encounter. It is important, however, that clinics identify, prioritize, and establish further assessment and treatment as indicated for their patients' pain complaints.

(6) Providers who encounter patients with challenging or complicated pain problems will consult the Anesthesia Pain Clinic or the Physical Medicine and Rehabilitation Service, who will initiate a multidisciplinary evaluation as indicated.

e. Care of Pediatric Patients with Pain.

See Appendix C

f. Care of Cancer Patients with Pain.

See Appendix D

g. Surgical Patients (APC/PACU).

See Appendix E

h. Care of Patients who receive Regional Anesthesia.

See Appendix F

i. Care of Patients who receive Epidural Catheters.

See Appendix G

j. Care of Patient who receive Duramorph.

See Appendix H

k. Care of Patients who receive PCA.

See Appendix I

l. Care of Inpatients who receive IV or IM Opioid Medications.

See Appendix J

m. Dosing Guidelines for Acetaminophen and Selected NSAIDs.

See Appendix K

n. Dosing Guidelines for Adjuvant Analgesics Commonly Used for Chronic Pain.

See Appendix L

o. Equianalgesic Chart: Approximate equivalent doses of opioids for moderate to severe pain

See Appendix M

9. Documentation

a. Outpatients: Pain assessment and management will be documented in the patient's outpatient treatment record. Pain assessment should utilize the numeric 0-10 scale.

b. Inpatients: Pain assessment and management will be documented in CIS to include the Nursing Admission Note, the Physician History and Physical, The Vital Signs Section, and as clinically indicated the Nursing and Physician Progress Notes.

c. Patients Receiving Therapy: Pain and comfort goals will be documented in the Physical Therapy and Occupational Therapy Consultation and therapy notes.

10. Reporting

a. All WRAMC staff and beneficiaries who suspect that a patient may be suffering because of pain should report their concerns to a health care provider, who should contact the patient's health care provider.

b. Nurses will report patients with ongoing pain management issues during changes of shift in order to ensure continuity of care.

c. Patients who believe that their pain is not adequately being medically managed should report this to their medical provider and whenever desired to the Patient Representative's Office.

d. Health care providers, who are concerned that an individual may be taking pain medications irresponsibly, will contact their service/section chiefs, who will then act on this appropriately depending on the circumstances. This may include:

(1) Consultation to the Anesthesia Pain Management Service
(2) Consultation to the Alcohol and Drug Addiction Specialists at Walter Reed
(3) Contact the pharmacy for limiting access for patient prescriptions.

11. Performance Improvement

a. The Deputy Commander for Clinical Services (DCCS) and the Deputy Commander for Nursing (DCN) will be responsible for the implementation of the organizational policy for pain management.

b. The Performance Improvement (PI) office will conduct surveys and chart reviews in cooperation with the Department of Nursing Research and Nursing Performance Improvement Office in order to track:

(1) Provider Knowledge & Attitude towards pain management. See Appendix N
(2) Patient Satisfaction with pain management. See Appendix O
(3) Chart reviewing

The results will be presented to the Quality Outcomes Committee for appropriate action.

c. Performance Improvement (PI) coordinators for each clinical department/service will conduct peer review on the effectiveness of their pain management program and their compliance with the organizational policy for pain management and report these results in the minutes they present to the Quality Outcomes Committee on a quarterly basis.

d. The Outcomes Management Service during their surveys of outpatients in various clinical settings will include questions pertaining to pain management. The results of these surveys will be reported to the Quality Outcomes Committee

12. Education

a. Patient Education:

(1) Inpatients and Outpatients will have access to the Walter Reed Army Medical Center Pain Management Patient Information Brochure. (See Appendix P)

(2) Health care providers will help explain pain management issues to patients on an individual basis as needed.

(3) Health care providers will make patients aware of the options that exist for treating their pain and incorporate them in the treatment plan development process.

(4) The pharmacy will provide information to patients concerning the use of pain management medications.

b. Provider Education:

(1) Department of Nursing: All personnel will receive initial training concerning pain assessment and management in Nursing Education and the Staff Development Service Orientation Program, with competency training occurring on the nurse's assigned unit. Annual training will be the responsibility of the Section and Units and augmented by BMAR training and other classes/conferences sponsored by Nursing Education.

(2) Clinical Departments: All Department Chiefs are responsible to ensure their personnel receive initial and ongoing training concerning pain assessment and management. This should be augmented by participating in relevant GME activities as well as BMAR training.

c. Resources:

(1) The Anesthesia Pain Service as well as the Physical Medicine and Rehabilitation Service will provide additional training to WRAMC personnel concerning pain management on request.

(2) The Pharmacy will provide information as needed with regards to pain medications.

(3) The WRAMC Comprehensive Pain Assessment and Management of Patients Regulation along with its Appendices will be readily available for provider reference.

Appendix A

Patient Rights and Responsibilities

Patient Rights:

As a patient at this hospital, you can expect

* Information about pain and pain relief measures;
* A concerned staff committed to pain prevention and management;
* Health professionals who respond quickly to reports of pain;
* Health professionals who believe your reports of pain; and
* State-of-the-art pain management.

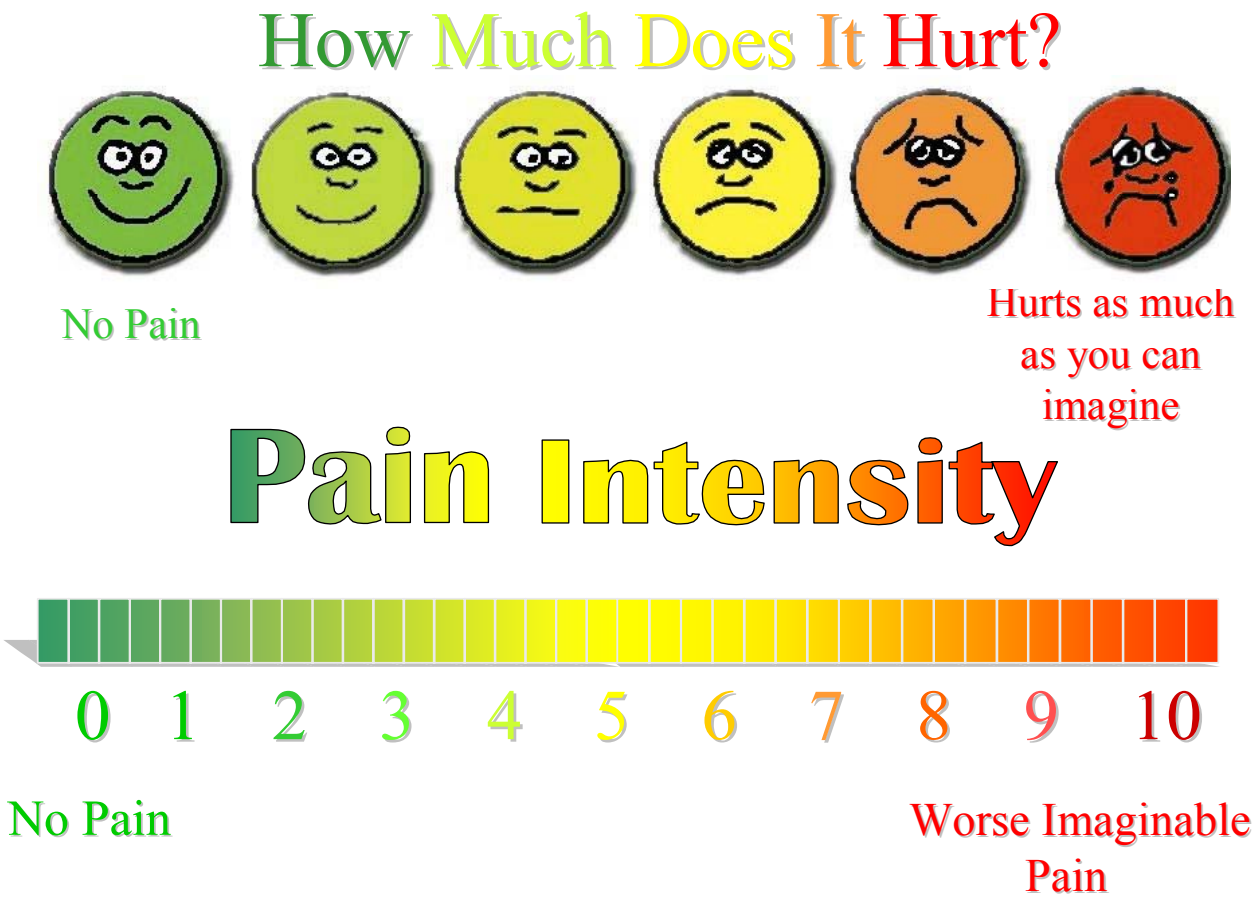
Patient Responsibilities:

As a patient at this hospital, we expect that you will

* Ask your doctor or nurse what to expect regarding pain and pain management;
* Discuss pain relief options with your doctor and nurse;
* Work with your doctor and nurse to develop a pain management plan;
* Ask for pain relief when pain first begins;
* Help your doctor and nurse assess your pain;
* Tell your doctor or nurse if your pain is not relieved; and
* Tell your doctor or nurse about any worries you have about taking pain medications.

Appendix B

Pain Assessment Tool



Appendix C

Pediatric Pain Assessment and Management

1. Purpose: To provide established guidelines for the assessment of pain and for the safe administration of pain medication to pediatric patients on ward 51. This SOP is meant to accompany and not override any previous SOP guidelines on medication administration.

2. Scope: This policy applies to all pediatric patients admitted to ward 51.

3. Responsibilities: Nursing staff and resident physicians are responsible for assessing pain in patients on admission and on a regular basis. Resident and attending physician assigned to the patient are responsible for prescribing pain medications and assessing response to pain.

4. References:

a. “Acute Pain Management in Infants, Children, and Adolescents: Operative and Medical Procedures" Clinical Practice Guidelines, U.S. DHHS 1992.

b. “Pain Management Children with Cancer”, 1999, Texas Cancer Council.

c. The Harriet Lane Handbook, 2000. The Johns Hopkins Hospital

5. Policies:

a. Assessment of Pain:

(1) All children and parents will be instructed on the use of the 0-10 pain rating scale on admission. For children under 6 years of age or who are deemed unable to understand a 0-10 scale, the FACES scale will be used. (See Appendix B)

(2) Pain rating scales (0-10 or FACES) will be present on vital sign carts and pain level will be assessed on admission and with vital signs.

(3) Patients will be assessed for the presence of pain. If positive answer, the level of pain will be assessed and recorded. Pain level > 4 on 0-10 scale or > 2 on FACES scale will warrant notification of physician and reassessment after intervention.

(4) For children who are non-communicative, (age less than 2 or neurologically impaired), their parent or guardian will be questioned as to their interpretation of the patient's pain status.

(5) Pediatric patients undergoing procedures (Surgery, phlebotomy, IV placement) will be assessed for pain before, during and after the procedure.

b. Treatment of Pain:

(1) **Preventive Measures:** When medically possible, EMLA cream will be place to all puncture sites one hour prior to the procedure.

(2) **Non-Narcotic Analgesics** are advised for mild - moderate pain. Recommended doses are described in the Harriet Lane Handbook (2000) page 893 and in References a and b above. If continued pain despite non-narcotic analgesics, narcotic analgesics will be prescribed (See below).

Appendix C (Continued)

(3) **Narcotic Analgesics** are advised for moderate – severe pain alone or in combination with non-narcotics drugs. These should be administered at recommended age/weight appropriate dosages and intervals as described in references a and b above. Patients receiving continuous narcotics, unless in hospice care, should be on a continuous heart rate and respiratory monitor.

(4) **Epidural Analgesia** (See Appendix G)

(5) **PCA Pump:** For children over 6 years old, a PCA pump will be prescribed if clinical conditions indicate (post operatively for prolonged pain). For children less than 6 years old or for neurologically impaired children, assessment will be made by the physician as to the ability for safety/compliance with the PCA. (See Appendix I for PCA guidelines)

(6) **Non-Pharmacological Treatments**: All patients on ward 51 will be assessed by the Child Life Service for educational, entertainment supplies to improve level of comfort and provide distraction aids.

(7) **Refractory Pain:** Complicated patients with protracted or refractory pain despite the Anesthesia Pain management service.

Appendix D

Assessment and Management of Pain for Patients with Cancer

1. Purpose: To provide established guidelines for the assessment of pain and for the safe administration of pain medication to adult hematology/oncology patients. This SOP is meant to accompany and not override any previous SOP guidelines on medication administration.

2. Scope: This policy applies to all adult hematology/oncology patients on Ward 71.

3. Responsibilities: Nursing staff and resident/fellow physicians are responsible for assessing pain in patients on admission on a regular basis. Resident/fellow and attending physicians assigned to the patient are responsible for prescribing pain medications and assessing response to pain.

4. References:

a. "Management of Cancer Pain: Adults" Clinical Practice Guidelines, U.S. DHHS, AHCPR Publication No. 94-0593.
b. World health Organization Guidelines for Cancer Pain. 1996
c. Guidelines for the Treatment of Cancer Pain. 2nd Edition, 1997
d. Cancer Pain Assessment and Treatment Curriculum Guidelines. American Society of Clinical Oncology. JCO:10;1976-82;1992.

5. Policies:

a. Assessment of Pain:

(1) All patients will be instructed on the use of the 0-10 pain rating scale on admission. If any barrier to communication exists, the FACES scale will be used**.** (Appendix B)
(2) Pain rating scales (0-10 or FACES) will be present on vital sign carts and pain level will be assessed on admission and with vital signs.
(3) Patients will be assessed for the presence of pain. If pain is present, the level of pain will be assessed and recorded. Pain level > 4 on 1-10 scale or > 2 on FACES scale will warrant notification of physician and reassessment after intervention.
(4) For non-communicative patients, their family member/medical attendant may be questioned as to their interpretation of the patient's pain status.
(5) Patients undergoing procedures (surgery, lumbar puncture, etc) will be assessed for pain before, during and after the procedure.

b. Treatment of Pain:

(1) **Preventative Measures:** When requested, EMLA cream will be applied to all puncture sites of subcutaneous catheters (arm ports, chest ports) one hour prior to the procedure.
(2) **Non-Opioid Analgesics** are advised for mild - moderate pain, possibly with the addition of an adjuvant such as a neuroleptic or anti-depressant (Appendix K and L). If continued pain despite non-opioid analgesics, opioid analgesics will be prescribed.
(3) **Opioid Analgesics** are advised for moderate – severe pain (in a step-wise manner) alone or in combination with non-opioid agents and adjuvant agents. These should be administered at recommended age/weight appropriate dosages and intervals as described in the references above or as in (Appendix M). In general, the three step World Health Organization analgesic ladder (reference 1 and 2 above) should be used

Appendix D (Continued)

(4) **Epidural Analgesia.** This pain control modality would be rarely used on Ward 71. Its use would be prescribed and administered by the Anesthesiology Pain Service. (Appendix G)

(5) **PCA Pump:** A PCA pump will be prescribed if clinical conditions indicate. Patients will be appropriately instructed in the use of “demand” medication administration from the pump by the physician. (Appendix I)

(6) **Non-Pharmacological Treatments**: These interventions will be addressed by Physical Therapy, Occupational Therapy or the Pain Management Service through consultation.

(7) **Refractory Pain:** Complicated patients with protracted or refractory pain despite the above measures will be referred to the pain management service.

Appendix E

Pain Management in Surgical Patients/APC/PACU

1. Purpose: To provide a comprehensive established criteria for the management of pain in patients undergoing surgical procedures. These guidelines shall have some variance depending upon how the patient enters the operative arena (i.e. as inpatients or as outpatients) and if the patient is in the preoperative, intraoperative or postoperative phase of surgery.

2. References: WRAMC Reg 40-98 Appendix E., PACU SOP: Medical Direction/Physician Coverage

3. Definitions:

a. **Pain Score** - the patient's subjective quantification of perceived pain intensity.
b. **APC** - Ambulatory Processing Center.
c. **PACU** - Post anesthesia Care Unit or recovery room.
d. **OR** - Operating Room.
e. **Regional Anesthesia** - includes spinal, epidural or other selective nerve blocks, which often have associated catheters for postoperative pain control.

4. Applicability: This policy applies to all patients who are undergoing surgical interventions in the WRAMC OR suites, GU suites, or Interventional Radiology suites.

5. Responsibilities:

a. Anesthesia Service

(1) Credentialed anesthesia providers shall see the patients in the APC preoperatively (i.e. at their scheduled preoperative visit) where a discussion of viable options for anesthesia will be discussed and the risks and benefits of the given options discussed. The anesthetic will decrease or eliminate the pain associated with the operative procedure. Also, when patients will be admitted postoperatively, methods of postoperative pain control will be discussed such as regional anesthesia techniques.

(2) A credentialed anesthesia provider on the day of surgery will review the options for anesthesia and then carry out the anesthetic discussed, unless there is a change in plan due to unforeseen circumstances (i.e. a failed block).

(3) Postoperatively, if the procedure results in the patient being admitted, they are candidates for regional anesthesia techniques, which will be managed by the anesthesia pain service.

(4) The Regional anesthesia team will make rounds daily on these patients.

(5) The regional anesthesia team will make dressing changes as needed, discontinue and remove the catheters when indicated.

b. Nursing Service

(1) APC nurses are responsible for: distribution of the WRAMC Pain Management Information Brochure (Appendix P); the pain assessment tool (0-10) numeric intensity scale contained within the brochure; assessing previous pain experience; providing education on pain control techniques and the comfort goal concept; and reinforcing information on anesthesia/physician selected pain management techniques.

Appendix E (Continued)

(2) PACU nurses will contact the anesthesia providers when orders for pain control are omitted or incomplete. When the prescribed dosage of pain medication is inadequate, the physician in charge will be called to evaluate the patient. The patient will not be discharged or released to a surgical ward until pain is adequately managed with a level of less than 4/10. Re-assessment of pain will be IAW standard PACU policies

(3) Ward nurses will notify the physician or anesthesia provider in charge of pain control (PCA/ward physician, Regional Anesthesia/Anesthesia Pain Service) when pain management is inadequate except on wards where nurses are trained to change infusion bags. Also the anesthesia pain service will be notified when Regional Anesthesia infusion bags are nearly completed.

c. Ward/Service Physician

The physician shall be responsible for pain control after discharge from the recovery room and beyond. When the patient is admitted postoperatively and PCA or other oral pain medications are assigned, the physician shall assure adequate pain control.

d. Pharmacy

Responsible for preparing epidural solutions via catheter administration.

6. Requirements: Only credentialed providers will order and/or manage pain medications for the surgical patient. Patient assessment will be performed when initial and subsequent adjustments in pain control are made.

7. Procedures:

a. Anesthesia

(1) Preoperatively, the patient will be counseled regarding pain control intraoperatively and postoperatively.

(2) Upon delivery of patients to PACU, measures for pain control will be included in the orders and placed in CIS. Any changes to the management of pain in patients shall require consultation of the anesthesia team.

(3) For infusions via regional anesthesia catheters, refer to Appendix F, section 7-a.

b. Nursing

In the APC or other alternate sites, preoperative patients will be provided at a minimum, the WRAMC Pain Management Patient Information brochure, assessment of pain management, and instructions on interpretation of the 0-10 Pain Intensity scale.

Documentation: All vital signs, pain levels (initial and reassessment), and adverse events will be documented in CIS on the vital signs sheet and/or progress notes according to hospital and unit policies.

Appendix E (Continued)

Adverse Events: All adverse events or deviations from hospital policy should be reported in accordance with current hospital guidelines.

Performance Improvement: Periodic review of adherence to hospital policy should occur on a regular basis and adverse events should be addressed through appropriate quality assurance guidelines.

Education: Routine in-services should be available to new staff in the management of pain at all levels (nurses to physicians) and through all processes (preoperatively through discharge).

Appendix F

Care of Patients who receive Regional Anesthesia

1. Purpose: To provide established criteria for the care and management of patients receiving continuous peripheral nerve analgesia and for post-operative pain management, as well as delineate the responsibilities of the medical team.

2. References:
Comprehensive Accreditation Manual for Hospitals (CAMH), Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

3. Definitions: Peripheral nerve analgesia: Analgesia provided through the use of an indwelling catheter placed in a nerve root sheath of a major nerve trunk. Local anesthetics and other pain medications are infused through the catheter to provide post-operative pain control.

4. Applicability: This policy applies to all patients who are receiving continuous peripheral nerve analgesic infusions.

5. Responsibility:

a. Anesthesia Service

(1) Only credentialed anesthesia providers may order the solution to be administered through a peripheral nerve catheter. The anesthesia provider will perform the initiation of the infusion. Intermittent boluses and rate changes may only be performed by a credentialed anesthesia provider.
(2) Overall responsibility for the management of the catheter falls to the attending anesthesiologist covering the acute pain service during the day and the on-call anesthesiologist during off-hour periods.
(3) The regional anesthesia team will make daily rounds on these patients.
(4) The regional anesthesia team will make dressing changes as needed, discontinue and remove the catheters when indicated.

b. Pharmacy

(1) Responsible for preparing epidural solutions.

c. Nursing Service

(1) Once the appropriate solution has been obtained from the pharmacy or anesthesia provider, the ward nurses will monitor the administration of the medication through either an Abbott or single channel Alaris infusion pump labeled and dedicated solely for regional anesthesia.
(2) Nurses are responsible for calling pharmacy to reorder the solution and calling the acute pain team to hang the infusion except on wards where nurses are trained to change infusion bags.
(3) Nursing staff will inspect the site at least once at the beginning of each shift.
(4) Nursing personnel will not change the catheter dressings. Should the dressing be loose or soiled, it should be reinforced with tape and the anesthesia service should be notified.

d. Ward Physician

Consult with the anesthesia service if the patient's pain is not adequately controlled by the peripheral nerve infusion or if undesirable side effects exist.

Appendix F (Continued)

6. Requirements: Only credentialed anesthesia providers will place and subsequently manage the regional anesthesia catheters.

7. Procedures:

a. Anesthesia

(1) Infusion solution and rate will be documented in the physician orders.
(2) Adjunctive medications for breakthrough pain, nausea and pruritus will be available through the physician orders.
(3)These patients will be followed daily by the regional anesthesia service for morning rounds and the acute pain service during the evening rounds. These rounds will be logged in the acute pain book
(4) A note will be placed in the chart by the physician making rounds.
(5) A record of the procedure will be logged by the regional anesthesia service.
(6)The acute pain service will be available 24 hours a day on the short-range pager 1144.

b. Nursing

(1) Ward nursing staff will take vital signs every four hours for the duration of the infusion taking care to note pain level using a 0-10 numeric pain intensity scale as well as motor function.
(2)Three ampules of naloxone, along with resuscitation equipment will be available on the unit.
(3) Intravenous access must be maintained while the catheter is being used and four hours after it is discontinued.
(4) If opioids are used in the infusion or as an adjunctive means of pain control respirator rate will be monitored every two hours for the first 24 hours, then every four hours.
(5) Notify anesthesia immediately for respiratory rate <10/ minute, stop the infusion and have naloxone ready for administration.
(6) Monitor and document blood pressure and pulse as ordered. (minimum of every 4 hours).
(7) Additional systemic narcotics/sedatives may be given with the knowledge of the acute pain team if there are no opioids being administered through the catheter.
(8) If inadequate pain relief exists (pain score >4), notify the anesthesia acute pain service.
(9) Patients will be monitored for the following side effects and treated in accordance with the standard orders:
(a) Alteration in mental status/sedation.
(b) Respiratory depression.
(c) Generalized pruritus.
(d) Urinary retention.
(e) Nausea/vomiting.
(f) Paresthesia or paralysis of the lower extremities. Notify the primary service and/or anesthesia acute pain team.
(10) Anesthesia acute pain service will be notified, after medicating the patient with standing orders, for unrelieved pain, itching, nausea or vomiting.

8. Documentation: All vital signs, pain levels, motor strength and adverse events will be documented in the CIS record according to hospital policy.

9. Reporting: All adverse events or deviations from hospital policy should be reported in accordance with current hospital guidelines.

Appendix F (Continued)

10. Performance improvement: Periodic review of adherence to hospital policy should occur on a regular basis and adverse events should be addressed through appropriate quality assurance guidelines.

11. Education: Routine in-service sessions should be available to new staff in the management of regional catheters and the anesthesia regional anesthesia service will be available to provide additional educational support.

Appendix G

Patients who Receive Epidural Catheters

1. Purpose:

a. To provide guidelines for hospital personnel caring for epidural analgesia recipients in inpatient care areas.

2. References:

a. Chalupka, S. and Sillon-Allard, B. (1989). When Your Patient Has an Epidural Catheter. RN, 89 12, 70, 73-77.

b. Barash, P., Cullen, B., and Stoelting, R. (1997). Clinical Anesthesia, Philadelphia; Lippincott Raven, pp.1320-1325.

3. Definitions:

a. Epidural Catheter
b. Epidural Analgesia

4. Applicability:

a. This is applicable to all providers caring for inpatients at WRAMC. Patients receiving continuous epidural infusions of local anesthetic or local anesthetic with narcotic may be monitored on the general ward or in the Intensive Care Units.

5. Responsibility:

a. Anesthesia Service

(1) Only Anesthesiologists or Certified Registered Nurse Anesthetists (CRNAs) may order the solution to be administered through an epidural catheter. The anesthesia provider will perform initiation of the infusion. Intermittent boluses and rate changes may only be performed by the anesthesia service.

(2) The Anesthesia provider will assign the Epidural Catheter order set and modify as needed.

(3) The Pain Service will make rounds daily.

(4) The Anesthesia Service will change epidural dressings as needed, discontinue and remove the catheter when indicated.

b. Pharmacy

(1) Responsible for preparing the epidural solutions.

c. Nursing Service

(1) Once the appropriate solution has been obtained from the Pharmacy or Anesthesia provider will administration of the medication via an Abbott epidural infusion pump.

(2) Nurses are responsible for calling pharmacy to reorder the solution and hanging the solution when it arrives.

(3) Nursing staff will inspect the site at least once at the beginning of each shift. Nursing personnel will not change epidural catheter dressings. Should the dressing become loose or soiled, it should be reinforced with tape and Anesthesia Service notified.

Appendix G (Continued)

d. Ward Physician

(1) Consult with Anesthesia Service if patient's pain is not adequately controlled by the epidural infusion or if undesirable side effects persist.

6. Procedure:

a. Administration: When administering controlled substances, the solution will be mixed by the CRNA or Anesthesiologist, or by qualified Pharmacy personnel.

b. Continuous infusion of epidural narcotics will be administered by Abbott infusion pumps only.

7. Documentation:

a. Enter IV infusion under intake and output (I&O.) Total amount infused at least once per shift and note any change in rate.

b. Assess pain control at least every 4 hours using a 0-10 numeric pain intensity scale and record on the vital sign sheet in the appropriate space.

c. Note inadequate pain relief in the nurses' notes and notify the Anesthesia Service.

Appendix H

Care of Patients who receive Duramorph

1. Purpose: To provide guidelines for hospital personnel caring for patients who received Duramorph.

2. References:

a. Baggerly, J., 1986, Journal of Neuroscience Nursing, Epidural catheters for pain management: The nurse's role.
b. Brokema, A., Veen, A., Fidler, V., Gielen, M., and Hennis 1998, Anesthesia and Analgesia, Postoperative analgesia with intramuscular morphine at fixed rate versus epidural morphine or sufentanil and bupivacaine in patients undergoing major abdominal surgery.
c. Naber, L., Jones, G., and Halm, M., 1994, Critical Care Nurse, Epidural analgesia for effective pain control.

3. Definitions:

a. Duramorph – Preservative –Free Morphine
b. Intrathecal- the subarachnoid space
c. Epidural – the potential space between the dura mater and arachnoid mater

4. Applicability: This is applicable to all providers caring for inpatients at WRAMC.

5. Responsibility:

a. Anesthesia Service
(1) Anesthesiologists or Certified Registered Nurse Anesthetists (CRNAs) may administer Duramorph via an epidural or intrathecal route. The Anesthesia Provider will assign the Intrathecal/Epidural Duramorph order set and modify as needed.
(2) The anesthesia provider will place the patients name, dose route, and time on the anesthesia workroom board.
(3) The Pain Service will make rounds the following day.

b. Nursing Service
Nursing staff will follow the standard intrathecal/epidural Duramorph order set.

c. Ward Physician
Consult with Anesthesia Service if patient's pain is not adequately controlled within the first 18 hours post administration or if undesirable side effects or pain persists after treating the patient with the standing orders.

6. Procedure:

a. Administration: The Anesthesiologist or CRNA will administer Duramorph via the intrathecal or epidural route.
b. If administered via epidural, no additional narcotics will be delivered through the epidural for the next 24 hours.

Appendix H (Continued)

7. Documentation:

a. Anesthesia provider will document in CIS and on the Anesthesia intraoperative record of the dose, route and time of administration.

b. The nursing staff will assess pain control at least every 4 hours using a 0-10 numeric pain intensity scale and record on the vital sign sheet in the appropriate space. Also, the continuous monitoring and hourly recording of the patient's respiratory rate and oxygen saturation for 24 hours post administration of Duramorph.

Appendix I

Care of Patients who receive a Patient Controlled Analgesia (PCA) Therapy

1. **Purpose:** To establish guidelines governing the use of Patient Controlled Analgesia (PCA) therapy at Walter Reed Army Medical Center.

2. **Applicability:** Applicable to all military and civilian personnel assigned to Walter Reed Army Medical Center who are involved in PCA therapy.

3. **References:**

a. Acute Pain Management Guideline Panel. Acute Pain Management: Operative of Medical Procedures and Trauma. Clinical Practice Guidelines. AHCPR Pub. No. 92-0032. Rockville, MD. Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services. Feb. 1992.

b. Baxter Healthcare Corporation, Baxter PCA II, User Manual.

c. McCaffery, M. & Pasero, C. PAIN CLINICAL MANUAL, St. Louis, Mosby, 1999.

4**. Definitions**:

a. Patient Controlled Analgesia (PCA). An analgesic administration system designed to enable maintenance of optimal analgesia levels throughout a specific therapeutic course. The therapy itself includes self-administration of physician prescribed narcotics by patients who have been instructed in the use of a device specifically designed for this purpose.

b. Baxter PCA II Pump: A syringe based, programmable infusion pump designed for the administration of intravenous (IV) medication. The three modes of the PCA pump are “PCA Mode” “Continuous Mode,” and “PCA/Basal Mode.” The “PCA Mode” allows a patient to manage their own acute pain needs with small intermittent doses of self-administered analgesia via a hand-held delivery button. The “Continuous Mode” provides a constant infusion of the analgesia for severe or long-term pain relief. The “PCA/Basal Mode” combines the two previously discussed options.

c. PCA Therapy Considerations:

(1) Patients with major psychiatric disorders
(2) Communication barriers (i.e. language)
(3) Cerebral dysfunction
(4) Patients under the age of 7
(5) Patients who are unable to understand or comply with instructions
(6) Patients that are unable to operate the PCA infuse demand button

5. **Responsibilities:**

a. Physician:

(1) Identify candidates for PCA therapy. Final decision for PCA therapy rests with the attending physician.

Appendix I (Continued)

(2) Complete PCA orders.
(3) Renew orders every 72 hours in writing. If a change is necessary, the physician must write the orders in CIS.
(4) Counsel patient and family on concept of PCA and the purpose of PCA therapy.

b. Pharmacy:

(1) Provide the pre-filled controlled substance syringes to nursing units.
(2) Ensure accountability of controlled substance syringes until released to units.

c. Medical Maintenance:

(1) Provide calibration and preventative maintenance to the PCA pump semi-annually IAW manufacturer's manual.
(2) Perform unscheduled services as needed IAW maintenance management plan.

d. Nursing:

(1) Chiefs, Medical/Psychiatric, Surgical, Pediatrics, and Critical Care sections ensure the review of PCA orientation and patient education programs annually and revise as needed.

e. Head Nurses:

(1) Ensure all licensed personnel utilizing equipment are competent in PCA therapy using standard competency process during orientation.
(2) Conduct annual PI monitoring of PCA therapy process per unit guidelines.
(3) Ensure current standard PCA therapy forms are available on the nursing unit.

f. Clinical NCOICs:

(1) Ensure completion calibration and maintenance checks.

g. Clinical Staff Nurses:

(1) Complete competency orientation in PCA therapy.
(2) Provide patient education for selected patients using established patient teaching guidelines and document accordingly.
(3) Initiate, maintain, change and discontinue PCA therapy according to physician orders, Nursing Care Plans/Orders, and PCA Pump Operators Manual.
(4) Monitor, assess and document patient status while undergoing PCA therapy.
(5) Ensure accountability/security of controlled substances. This will be accomplished by maintaining the pump key on the controlled substances key ring, accounting for it each shift change, and documenting addition of new syringe IAW Pharmacy guidelines.
(6) Ensure stability and compatibility of IVPB medications prior to administering through PCA line.

h. Licensed Practical Nurses:

(1) Complete competency orientation in PCA therapy.
(2) Verify setup with Registered Nurses and change cartridges as needed according to physician orders.
(3) Monitor efficacy of analgesia for patients receiving PCA therapy and notify RN if adjustments need to be made with pump settings.
(4) Monitor, assess, and document patients' status while undergoing PCA therapy in collaboration with RN.

6. **Procedure**:

a. Patient selection: The ultimate decision for choosing suitable patients to receive PCA therapy rest with the attending physician. The nursing staff should assist in identifying patients who are candidates. The patient should meet all the following criteria:

(1) age over 7
(2) understand and comply with instructions
(3) need parenteral analgesia
(4) have no allergies to proposed medications
(5) have an IV line at rate of at least TKO
(6) have a clear sensorium

b. The prescribing physician writes, orders, and counsels the patient and family on a concept of PCA and the purpose of the PCA therapy.

c. The RN is responsible for educating the patient/family on how to operate the PCA pump, assessing the patient's level of understanding of the therapy and providing additional instruction as necessary. Education will be conducted as early as possible after the patient is identified as a PCA therapy candidate. Educational teaching will be documented and reinforced as necessary. Instructions/education will include the following:

(1) concept of PCA therapy
(2) techniques of using the pump
(3) when to notify nursing staff
(4) safety mechanisms built into the line
(5) the need to maintain an IV line throughout therapy
(6) alternative methods of pain relief available

d. Initiating PCA Therapy:

(1) Written orders for PCA therapy must be initiated by a physician. Orders must include:

(a) Analgesia medication type and drug concentration (mg/mL)
(b) Bolus, if desired. Order in mL.
(c) Basal rate, if desired. Order in mL
(d) PCA dose. Order in mL.
(e) Delay. Order in minutes.
(f) Monitoring parameters.
(g) Treatment of side effects

Appendix I (Continued)

(2) At 72 hours of PCA therapy, the physician must reevaluate the patient's need for PCA therapy and either discontinue or renew PCA therapy for another 72 hours.

7. **Documentation:**

a. PCA therapy documentation and monitoring of effectiveness begins at prescription time and is ongoing until therapy is discontinued utilizing the following:

(1) Patient's own perception
(2) Physicians orders
(3) Patient teaching
(4) Patient Controlled Analgesia Flow sheet

b. Documentation of PCA therapy in patient treatment record.

(1) The team leader will ensure that PCA documentation is completed each shift and sign off with oncoming shift.
(2) The initial entry will be made by the RN setting up the PCA pump for the patient.
(3) Monitor vital signs and Sa02 every 15 minutes x 4 initially and following subsequent doses, then every four hours or as ordered by the physician. More frequent assessment may also be warranted if the patient is given medications which could potentiate the effect of the narcotic (i.e. anti-emetics, sedatives) or there is a change in the patient's condition. Document the vital signs along with the number of demands and attempts.
(4) The PCA pump must be totaled and cleared at the end of each shift.
(5) At discontinuation of PCA therapy, all remaining narcotics will be disposed of in accordance with Pharmacy guidelines and waste documented appropriately. Documentation should include the amount wasted, date and time, followed by the signature of the nurse, and the signature of a witness. Materials will be disposed of IAW Infection Control policy. The pump will be cleaned and disinfected thoroughly with an Infection Control Committee approved product.

Appendix J

Care of Inpatients who receive Intravenous (IV) or Intramuscular (IM) Opioid Medications

1. Purpose: To provide established criteria for the care and management of inpatients receiving intravenous or intramuscular opioid medications for pain management and delineate responsibilities.

2. References: Will be added.

3. Definitions:

a. Opioid – refers to natural, semi-synthetic and synthetic drugs that relieve pain by binding to opioid receptors.

b. Direct access to the central blood compartment through a vein.

c. Indirect access to the central blood compartment through an injection into a muscle belly.

4. Applicability: This policy applies to all patients who receive opioid medications through the intravenous or intramuscular routes to include continuous infusions.

5. Responsibility

a Anesthesia Service

(1) Responsible for both the delivery and monitoring of opioid medications in the intraoperative setting.

(2) Responsible for creation and implementation of conscious sedation guidelines for the hospital.

b. Pharmacy

(1) Responsible for providing parenteral opioid solutions and for mixing infusions.

c. Nursing Service

(1) Once the appropriate solution has been obtained from the pharmacy, the ward nurses will monitor the administration of the infusions through an Alaris infusion pump.

(2) Nurses are responsible for calling pharmacy to reorder the solution.

(3) Nursing staff will inspect intravenous sites at least once at the beginning of each shift. Nursing personnel or other qualified individuals can change dressings or start new access lines.

(4) Nursing staff or other qualified personnel will deliver intramuscular injections using appropriate aseptic techniques and will monitor patients appropriately after the medications are given.

(5) Continuous infusions through a patient controlled analgesia device should be monitored accordingly as outlined in the regulation for PCAs.

d. Attending or Resident Physician

(1) Identify patients in need of parenteral opioids. Final decision for this therapy rests with the ward physician.

(2) Complete medication orders and enter into CIS as per hospital protocol.

(3) Ensure that the orders reflect the need for appropriate monitoring for potential side effects and adverse events as a result of the medication.

(4) In the case of delivery of medications for the purpose of conscious sedation for a patient, the physician is responsible for assuring that the medication is given in accordance with the hospitals conscious sedation guidelines.

Appendix J (Continued)

6. Requirements:

a. Only those with appropriate training in administration of IV/IM medications will inject the medications.
b. Only credentialed providers may prescribe the medications.
c. Appropriate monitoring and resuscitative equipment must be available on each ward to detect and appropriately treat all adverse events.
d. Continuous infusions of opioids must be limited to the Intensive Care units only with the exceptions of low rate infusions as background for PCA patients and for palliative care patients.

7. Procedures:

a. Ward Physician
(1) The ward physician (or credentialed provider) is responsible for the selection of patients in need of IM/IV opioid therapy for pain. The patient should meet all the following criteria:
(a) Need parenteral analgesia
(b) Have no allergies to proposed medications.
(c) Have an IV line for IV medications or infusions.
(d) Have a clear sensorium (with the exception of some palliative care and ICU patients).
(2) The prescribing provider writes orders and counsels the patient regarding the therapy.
(3) Adjunctive medications for breakthrough pain, nausea and pruritus will be available through the physician's orders.

b. Anesthesia
(1) In the Post-Anesthesia Care Unit the anesthesia provider is responsible for the immediate postoperative pain medication orders.
(2) Standard orders for opioid pain medications are available through CIS.
(3) Adjunctive medications for breakthrough pain, nausea and pruritus will be available through the physician's orders.
(4) Once the patient is turned over to the surgical team, they are responsible for further administration and the appropriate monitoring of patients receiving IV/IM medications.

c. Nursing
(1) Ward nursing staff will be responsible for checking vital signs on patients receiving opioid medications every 4 hours. They will also be responsible for checking vital signs every 5 minutes four 20 minutes after an IV bolus medication is given and every 10 minutes for 30 minutes after an intramuscular injection is given.
(2) Three ampules of naloxone, along with resuscitation equipment will be available on the unit.
(3) Pulse oximetry must be available on the unit and will be used at the discretion of the ward physician.
(4) Intravenous access must be maintained for those receiving infusions or IV boluses.
(5) Notify ward physician immediately for respiratory rate <10/ minute, stop the infusion and have naloxone ready for administration.
(6) Monitor and document blood pressure and pulse as ordered. (minimum of every 4 hours).
(7) If inadequate pain relief exists, notify the ward physician for further adjustments of medications.
(8) Patients will be monitored for the following side effects and treated in accordance with standard orders:

Appendix J (Continued)

(a) Alteration in mental status/sedation
(b) Respiratory depression
(c) Urinary retention
(e) Nausea/vomiting
(f) The ward physician will be notified after medicating the patient with standing orders for unrelieved pain, itching, nausea or vomiting.

8. Documentation: All vital signs, pain levels, and adverse event will be documented in the CIS record according to hospital policy.

9. Reporting: All adverse events or deviations from hospital policy should be reported in accordance with current hospital guidelines.

10. Performance improvement: Periodic review of adherence to hospital policy should occur on a regular basis and adverse events should be addressed through appropriate quality assurance guidelines.

11. Education: Routing in-service sessions should be available to new staff in the management of IV/IM medications and the anesthesia pain service will be available to provide additional educational support.

Appendix K

Dosing Guidelines for Acetaminophen and Selected NSAIDs:

Recommended Generic (Brand) Name(s)	Starting Oral Dose (mg)*	Maximum Oral Dosing p^ (mg/day) Schedule Recommended * *		Comments
acetaminophen (Tylenol, many	650	q4-6h	4000-6000	No platelet or GI toxicity.
aspirin (Bayer, many others)	650	q4-6h	4000-6000	May not be well tolerated.
choline magnesium trisalicylate (Trilisate)	500-1000	q12h	4000	No effect on platelet aggregation. Available as a liquid.
diclofenac [Cataflam (immediate-release) Voltaren Delayed Release, Voltaren XR (extended release)]	25	q8h	150	
diflunisal (Dolobid)	500	q12h	1500	
ibuprofen (Motrin, Advil, many	400	q6h	3200	Available as a suspension.
ketoprofen (Orudis, Oruvail	25	q6-8h	300	Available rectally and as a topical
ketorolac (Toradol)	10	q6h	40	Use limited to 5 days.
nabumetone (Relafen)	1000	q24h	2000	Minimal effect on platelet
naproxen (Naprosyn, Aleve)	250	q12h	1025-1375	
salsalate (Disalcid)	500-1000	q12h	4000	Minimal effect on bleeding time.

---------- fold here ----------

* Should be reduced by one-half to two-thirds in the elderly, those on multiple drugs, or those with renal insufficiency.

"""Data are lacking, but the dose listed is thought to be the maximum needed by most patients for analgesia and the dose beyond which side effects are more likely. Some patients require or tolerate less or more.

h = hour; q = every

For references, see: McCaffery M, Portenoy RK: Nonopioids: Acetaminophen and nonsteroidal antiinflammatory drugs, pp. 129-160. In: McCaffery M, Pasero C: **Pain: Clinical Manual,** St. Louis, 1999, Mosby pp.139-140.

Indications for nonopioid analgesics:

1. Mild pain. Start with a nonopioid. Acetaminophen or a NSAID alone often provides adequate relief.
2. Moderate to severe pain. Pain of any severity may be at least partially relieved by a nonopioid, but a NSAID alone usually does not relieve severe pain.
3. Pain that requires an opioid. Consider adding a nonopioid for the opioid dose-sparing effect.

Gastroprotective therapies for prevention of ulcers in patients taking NSAIDs:

- Misoprostol (Cytotec)
- Famotidine (Pepsid) 40 mg bid.
- Combination of H2 blocker, e.g., ranitidine (Zantac), sucralfate (Carafate), and antacids.

Preventive strategies when bleeding is a concern:

- Use NSAIDs that have minimal or no effect on bleeding time, such as choline magnesium trisalicylate (Trilisate), salsalate (Disalcid). And nabumetone (Relafen).
- Use acetaminophen instead of a NSAID.
- To decrease bleeding associated with operative procedures, stop aspirin therapy one week before surgery, and stop most other NSAIDs 2 to 3 days before surgery.

1999, Mosby pp. 139-140.
From McCaffery M, Pasero C: **Pain: Clinical Manual,** Copyright®, 1999, Mosby

Appendix K (Cotinued)

Salicylates		Max Daily Dose	Usual Dose	Analgesic	Anti-Inflam	Anti-pyretic	Cost	Comments
Acetylsalicylic Acid (Aspirin)	OTC	4000mg	650mg q4h	+++	+++	+++	$	Consider Enteric Coated
Salsalate (Disalcid)	F	3000mg	1000mg tid	+++	+++	++	$	Less GI upset
Diflunisal (Dolobid)	SPP	1500mg	250-500mg q8-12h	+++	++	+	$$$	
Para-aminophenols								
Acetaminophen (Tylenol)	OTC	4000mg	650mg q4h	+++	0	+++	$	
Indoleacetic Acids								
Indomethacin (Indocin)	F	200mg	25-50mg q8h	+++	+++	+++	$	
Etodolac (Lodine)	F	1200mg	200-400 q6-8h				$$	
Ketorolac (Toradol)- po	SPP	40mg/d (max of 5 days)	10mg q4-6h	++++			$$$$	Use NMT 5 days max
Ketorolac (Toradol)- IV/IM	IP	120mg/day	30mg q6h	++++			$$$$	Use NMT 5 days max
Diclofenac K+ (Catalfam)	SPP	200mg	50mg tid		+++		$$$	
Diclofenac Na+ (Voltaren)	F	225mg	50mg tid		+++		$$$	Also combo w/ Misoprosto
Tolmetin (Tolectin)	F	2000mg	200-400mg tid	++	+++	++	$$	
Sulindac (Clinoril)	F	400mg	200mg bid	+++	+++	+++	$	
COX-2 Inhibitors								
Celecoxib (Celebrex)	DAK	200mg	100mg bid	+++	+++		$$$	Avoid w/ Sulfa allergy
Rofecoxib (Vioxx)	DAK	50mg	25-50mg qd	+++	+++		$$$$	
Fenamates								
Meclofenamate (Meclomen)	SPP	400mg	50mg q4-6h	++	++	+	$$$$	
Mefanamic Acid (Ponstel)	NF	1000mg	250mg q4h	++	++	+	$$	
Nonacidic Agent								
Nabumetone (Relafen)	NF	2000mg	500mg bid				?	
Propionic Acids								
Ibuprofen (Motrin)	F	3200mg	400mg q4-6h	+++	+++	++	$	
Naproxen (Naprosyn)	F	1500mg	250-500mg q12h	+++	+++	++	$$	
Naproxen Sodium (Anaprox)	SPP	1375mg	200mg q4-6h				$	
Fenoprofen (Nalfon)	NF	3200mg	200mg q4-6h	++	+++	+	$$	
Flurbiprofen (Ansaid)	SPP	300mg	100mg bid-tid				$$	
Oxaprozin (Daypro)	NF	1800mg	600-1200mg qd				?	
Ketoprofen (Orudis)	SPP	300mg	50-75mg tid-qid	++	+++	+	$$$	
Benzothiazine (Oxicams)								
Piroxicam (Feldene)	F	20mg	20mg qd	+++	+++	+	$$	

F=Formulary
SPP=Special Purchase
IP=Inpatient Use only

N=Non-Formulary
DAK=Drug Authorization Key Required

Appendix L

Dosing Guidelines for Adjuvant Analgesics Commonly Used for Chronic Pain

Drugs/Routes	Usual starting Dose (mg/day)	Usual effective dose range (mg/day)	Dosing schedule	Comments
Anticonvulsants:				
carbamazepine (Tegretol) PO	200	600-1200	q6-8h	
clonazepam (Klonopin) PO	0.5	0.5-3	q8h	
divalproex sodium (Depakote) PO	500	1500-3000	q8h	
phenytoin (Dilantin) PO	300	300	hs	Loading doses may be used, e.g., 5.00 mg X 2.
IV	500-1000	?	?	IV dose used for rapidly escalating neuropathic pain.
valproate sodium (Depacon) IV	max. 20 mg/kg over 5 minutes	?	?	IV dose used for rapidly escalating neuropathic pain; followed by PO doses.
gabapentin (Neurontin) PO	100-300	300-3600	q8h	May increase dose daily.
Tricyclic Antidepressants:				
amitriptyline (Elavil) PO	10-25	50-150	hs	Traditionally amitriptyline was first line. Due to side effects and recent evidence of comparable analgesia, desipramine is preferred for many patients, especially the elderly; less hypotension with nortriptyline. Evaluate and titrate upward q3-5 days.
clomipramine (Anafranil) PO	10-25	50-150	hs	
desipramine (Norpramin) PO	10-25	50-150	hs	
doxepin (Sinequan) PO	10-25	50-150	hs	
imipramine (Tofranil) PO	10-25	50-150	hs	
nortriptyline PO (Aventyl, Pamelor)	10-25	50-150	hs	
Newer" Antidepressants:				
fluoxetine (Prozac) PO	10-20	20-40	qd	Newer" antidepressants have fewer side effects than tricyclics; less evidence of effectiveness
paroxetine (Paxil) PO	20	20-40	qd	
sertraline (Zoloft) PO	50	150-200	qd	
Corticosteroids:				
dexamethasone (Decadron) PO	Low-dose regimen:	same	qd or bid	In advanced medical illness, long-term treatment with low doses is generally well tolerated; used when pain persists after optimal opioid dosing. High doses used for acute episodes of severe pain unresponsive to opioids.
	High-dose regimen: 100mgthen 96 mg in 4 divided doses.	same	qid	
Local Anesthetics:				
mexiletine (Mexitil) PO	150	900-1200	q8h	Mexiletine is safer than tocainide. Plasma concentrations should be followed to reduce risk of toxicity. May be appropriate for rapidly escalating neuropathic pain.
lidocaine IV	2-5 mg/kg	—	—	Continuous infusion.
subcutaneous, IV	2.5 mg/kg/h	same	—	Brief infusion over 20-30 minutes. Analgesia occurs within 15-30 minutes.
Others:				
baclofen (Lioresal) PO	15	30-200	q8h	Indicated for "shooting" neuropathic pain.
calcitonin subcutaneous, IV	25 IU	100-200 IU	qd	Calcitonin is indicated for various neuropathic pains; bone osteoarthritis.
nasal spray (Miacalcin)	200 IU	200-400 IU	qd	
clonidine transdermal (Catapres)	0.1	?	qd	Clonidine doses may be increased by 0.1 mg/day q3-5 days. Multipurpose for chronic pain.
PO	0.1	?	qd	

Appendix L (Continued)

? = unknown, unclear; h = hour; hs = bedtime; q = every; qd = every day **For references, see:** Portenoy RK, McCaffery M:
Adjuvant analgesics, pp. 300-361. In McCaffery M, Pasero C: **Pain:Clinical Manual,** St. Louis, 1999, Mosby pp. 342-344.

Adjuvant analgesic usually tried first for: Continuous neuropathic pain: antidepressants, systemic local anesthetics, gabapentin; Lancinating and sudden onset neuropathic pain: anticonvulsants, baciofen.

Tricyclic Antidepressants

		Reuptake Inhibition			Anti-	Orthostatic	Cardiac	Weight	Usual starting	Usual effective
Drug	**F/NF**	**N**	**S**	**Sedative**	**cholinergic**	**Hypotension**	**Arrhythmia**	**Gain**	**dose (mg@hs)**	**dose range**
Doxepin (Sinequan-cap)	F	low	moderate	++++	+++	++	++	++++	10-25	50-150
Amitriptyline (Elavil-tab)	F	mod	high	++++	++++	++++	+++	++++	10-25	50-150
Imipramine (Tofranil-tab)	F	mod	moderate	+++	+++	++++	+++	++++	10-25	50-150
Nortriptyline (Pamelor-cap)	F	mod	low	++	++	+	++	+	10-25	50-150
Desipramine (Norpramine-tab)	F	high	low	++	+	++	++	+	10-25	50-150
Clomipramine (Anafranil-cap)	NF	mod	high	++++	++++	++	+++	++++	10-25	50-150
Protriptyline (Vivactil-tab)	SPP	mod	low	+	++	++	+++	0	15-60	15-60
Trimipramine (Surmontil-cap)	NF	low	low	++++	++++	+++	+++	++++	100-300	50-150
Trazodone (Desyrel- tab)	F	very low	moderate	++++	0	+++	+	++	150-500	50-400

SSRIs

		Reuptake Inhibition			Anti-	Orthostatic	Cardiac	Weight	Usual starting	Usual effective
Drug	**F/NF**	**N**	**S**	**Sedative**	**Cholinergic**	**Hypotension**	**Arrhythmia**	**Gain**	**Dose/day**	**dose range**
Fluoxetine (Prozac-cap)	F	very low	high	0	0	0	0	0	20mg-AM**	10-40
Paroxetine (Paxil-tab)	F	very low	very high	+	+	0	0	+	20mg-AM**	20-50
Sertraline (Zoloft-tab)	F	very low	very high	0	0	0	0	0	50mg-AM**	50-150
*Citalopram (Celexa-tab)	F	very low	very high	0	0	0	0	0	20mg qd	10-40
Fluvoxamine (Luvox- tab)	F	very low	very high	0	0	0	0	0	50mg-hs	100-300

* Indicated for tension headache

** Dose Rx in AM due to insomnia

Anticonvulsants

		Goal Therapeutic		Anti-	Orhtostatic	Cardiac	Weight	Usual starting	Usual effective
Drug	**F/NF**	**Range**	**Sedative**	**Cholinergic**	**Hypotension**	**Arrhythmia**	**Gain**	**Dose/day**	**dose range**
Carbamazepine (Tegretol-tab)	F	6-12mcg/ml	+++	++		++		200mg bid	800-1200mg/day
Clonazepam (Clonopin-tab)	F		+++		++		++	0.5mg qd	up to 1.5mg
Divalproex (Depakote -tab)	F	50-100mcg/ml	++				++	10-15mg/kg/day	30-60mg/kg/day
Phenytoin (Dilantin-cap)	F	10-20mcg/ml	++					100mg tid	300mg/day
Valproic Acid (Depakene-cap)	NF	50-100mcg/ml	++		++		++	10-15mg/kg/day	30-60mg/kg/day
Gabapentin (Neurontin-cap)	F		+++					300mg-hs	300-3600mg/day

F = Formulary
NF = Non Formulary
SPP = Special Purchase

Appendix M

Equalanalgesic Chart: Approximate Equivalent Doses of Opioids for Moderate to Severe Pain

ANALGESIC	**PARENTERAL (IM, SC, IV) ROUTE [1,2] (mg)**	**PO ROUTE [1] (mg)**	**COMMENTS**
MU OPIOID AGONISTS			
MORPHINE	10	30	Standard for comparison. Multiple routes of administration. Available in immediate-release and controlled-release formulations. Active metabolite M6G can accumulate with repeated dosing in renal failure.
CODEINE	130	200 NR	IM has unpredictable absorption and high side effect profile; used PO for mild to moderate pain; usually compounded with nonopioid (e.g., Tylenol #3).
FENTANYL	100 ug/h parenterally and transdermally = 4 mg/h morphine parenterally; 1ug/h transdermally = 2mg/24h morphine PO	____	Short half-life, but at steady state, slow elimination from tissues can lead to a prolonged half-life (up to 12 h). Start opioid-naive patients on no more than 25ug/h transdermally. Transdermal fentanyl NR for acute pain management. Available by oral transmucosal route.
HYDROMORPHONE (Dilaudid)	1.5	7.5	Useful alternative to morphine. No evidence that metabolites are clinically relevant; shorter duration than morphine. Available in high-potency parenteral formulation (10 mg/ml) useful for SC infusion; 3 mg rectal = 650 mg aspirin PO. With repeated dosing (e.g., PCA), it is more likely that 2-3 mg parenteral hydromorphone = 10 mg parenteral morphine.
LEVORPHANOL (Levo-Dromoran)	2	4	Longer acting than morphine when given repeatedly.Long half-life can lead to accumulation within 2-3 days of repeated dosing.
MEPERIDINE	75	300 NR	No longer preferred as a first-line opioid for the management of acute or chronic pain due to potential toxicity from accumulation of metabolite, normeperidine. Normeperidine has 15-20 h half-life and is not reversed by naloxone. NR in elderly or patients with impaired renal function; NR by continuous IV infusion
METHADONE (Dolophine)	10	20	Longer acting than morphine when given repeatedly. Long half-life can lead to delayed toxicity from accumulation within 3-5 days. Start PO dosing on PRN schedule; in opioid-tolerant patients converted to methadone, start with 10-25% of equianalgesic dose.
OXYCODONE	____	20	Used for moderate pain when combined with a nonopioid (e.g., Percocet, Tyiox). Available as single entity in immediate-release and controlled-release formulations (e.g., OxyContin); can be used like PO morphine for severe pain
OXYMORPHONE (Numorphan)	1	10 rectal	Used for moderate to severe pain. No PO formulation.

[1] Duration of analgesia is dose dependent; the higher the dose, usually the longer the duration.

[2] IV boluses may be used to produce analgesia that lasts approximately as long as I M or SC doses. However, of all routes of administration, IV produces the highest peak concentration of the drug, and the peak concentration is associated with the highest level of toxicity, e.g., sedation. To decrease the peak effect and lower the level of toxicity, IV boluses may be administered more slowly, e.g., 10 mg of morphine over a 15 minute period or smaller doses may be administered more often, e.g., 5 mg of morphine every 1-1.5 hours.

FDA = Food and Drug Administration; NR = not recommended; = roughly equal to

Appendix M (Continued)

OPIODS CONTINUED

ANALGESIC	PARENTERAL (IM,SC,IV) ROUTE [1,2] (mg)	PO ROUTE[1]	COMMENTS
AGONIST-ANTAGONIST OPIOIDS: Not recommended for severe, escalating pain. If used in combination with mu agonists, may reverse analgesia and precipitate withdrawal in opioid dependent patients.			
BUPRENORPHINE (Buprenex)	0.4		Not readily reversed by naloxone; NR for laboring patients.
BUTORPHANOL (Stadol)	2		Available in nasal spray
DEZOCINE (Dalgan)		10	
NALBUPHINE (Nubain)	10		
PENTAZOCINE (Talwin)	60	180	

Selected References For more complete information and additional references, see: Pasero C, Portenoy RK, McCaffery M: Opioid analgesics, pp. 161-299. In: McCaffery M, Pasero C: **Pain Clinical Manual,** St. Louis, 1999, Mosby pp. 241-243. American Pain Society (APS): **Principles of analgesic use in the treatment of acute and cancer pain,** ed. 3, Glenview, IL, 1992, APS. Lawlor P, Turner K, Hanson J, et al: Dose ratio between morphine and hydromorphone in patients with cancer pain: a retrospective study, **Pain** 72(1,2):79-85, 1997. Manfredi PL, Borsook D, Chandler SW, et al: Intravenous methadone for cancer pain unrelieved by morphine and hydromorphone: clinical observations, **Pain** 70:99-101, 1997. Portenoy RK: Opioid analgesics. In Portenoy RK, Kanner RM, editors: **Pain management: theory and practice,** Philadelphia, 1996, FA Davis Company, pp. 249-276.

Equianalgesic Chart
Approximate equivalent doses of PO nonopioids and opioids for mild to moderate pain

ANALGESIC	PO DOSAGE (MG)
Nonopioids	
Acetaminophen	650
Aspirin (ASA)	650
Opioids*	
Codeine	32-60
Hydrocodone**	5
Meperidine (Demerol)	50
Oxycodone***	3-5
Propoxyphene (Darvon)	65-100

* Often combined with acetaminophen; avoid exceeding maximum total daily dose of acetaminophen (4000mg/day).
** Combined with acetaminophen, e.g., Vicodin, Lortab.
*** Combined with acetaminophen, e.g., Percocet, Tyiox. Also available alone as controlled-release OxyContin and immediate-release formulations.

A Guide to Using Equianaglgesic Charts

- Equianalgesic means approximately the same pain relief.
- The equianalgesic chart is a guideline. Doses and intervals between doses are titrated according to individual's response.
- The equianalgesic chart is helpful when switching from one drug to another, or switching from one route of administration to another.
- Dosages in the equianalgesic chart for moderate to severe pain are not necessarily starting doses. The doses suggest a ratio for comparing the analgesia of one drug to another.
- For elderly patients, initially reduce the recommended adult opioid dose for moderate to severe pain by 25% to 50%.
- The longer the patient has been receiving opioids, the more conservative the starting doses of a **new** opioid.

Selected References: For more complete information and additional references, see: McCaffery M, Portenoy RK: Nonopioids: Acetaminophen and nonsteroidal antiinflammatory drugs, pp. 129-160. In: McCaffery M, Pasero C: **Pain: Clinical Manual,** St. Louis, 1999, Mosby p. 133.

American Pain Society (APS): **Principles of analgesic use in the treatment of acute pain and cancer pain,** ed. 3, Glenview, IL, APS, 1992.

Kaiko R, Lacouture P, Hopf K, et al: Analgesic efficacy of controlled-release (CR) Oxycodone and CR morphine. **Clin Pharmacol Ther** 59:130, 1996.

Appendix M (Continued)

Class	Dosage Form	F/NF	Equianalgesic Dose (mg) Parenteral	Oral	Analgesic	Antitussive	Respiratory Depression	Emesis	Sedation
Phenanthrenes									
Codeine (w/ APAP)	po	F	**IM** 120-130	200	+	+++	+	+	+
Hydrocodone		NF	-	5-10	+	+++	+	nd	nd
Hydromorphone- various	IM/SC	F-1	**IM** 1.3-1.5 / **SC** 1-1.5		++	+++	++	+	+
Hydromorphone 2mg	po	F		7.5	++	+++	++	+	+
Levorphanol		NF	**IM** & **SC** 2	4	++	++	++	+	++
Morphine	po	2	**IM** & **SC** 10	30-60	++	+++	++	++	++
MSO4	IV/IM	F-1							
15mg- MS Contin	po	F							
30mg- MS Contin	po	F							
60mg- MS Contin	po	F							
100mg- MS Contin	po	F							
200mg- MS Contin	po	F							
20mg/ml soln	po	SPP							
20mg/5ml soln	po	F							
Oxycodone		2	**n/a**	30	++	+++	++	++	++
Percocet Equiv	po	F							
5mg-IR	po	F							
10mg SR	po	DAK							
20mg SR	po	DAK							
40mg SR	po	DAK							
Oxymorphone		NF	**IM** 1 / **SC** 1-1.5	Rectal 5, 10	++	+	+++	+++	nd
Phenylpiperidines									
Alfentanil	IM	NF	IM 0.4-0.8	nd	++	nd	nd	nd	nd
Fentanyl	2				++	nd	+	+	nd
50mcg/ml soln	IM/IV	F	IM 0.1-0.2						
25mcg patch	TD	F		**Based on 24 hr po morphine dose**					
50mcg patch	TD	F							
75mcg patch	TD	F							
100mcg patch	TD	F							
Meperidine	po	F	IM 75 / SC 75-100	300	++	+	++	nd	+
Sufentanil	IM	F	IM 0.01-0.04	nd	+++	nd	nd	nd	nd
Diphenylheptanes									
Levomethadyl		NF	nd	nd	++	nd	nd	+	nd
Methadone	po	F	IM 10 / SC 8-10	10-20	++	++	++	+	+
Propoxyphene Napsylate	po	F	ND	130	+	nd	+	+	+
Anilidopiperidines									
Remifentanil		1	nd	nd	+++	nd	++	++	nd

Appendix N

Provider Knowledge and Attitudes Survey

6003237056

Physicians' Pain Knowledge & Attitude Survey

Shade Circles Like This--> ●
Not Like This--> ⊗ ✓

Age | Sex

Rank/GS Grade

Number of Years in Practice

Area of current clinical practice (choose one, only)

- ○ Medical
- ○ Surgical
- ○ Critical Care (ICU)
- ○ ER
- ○ OB/GYN
- ○ Pediatrics
- ○ Psychiatry
- ○ Oncology
- ○ Anesthesia
- ○ Other, specify: _____

Type of position

- ○ Intern
- ○ Resident
- ○ Attending
- ○ Physician Assistant

If you are in training, please circle your level of training:

○ PGY 1 ○ PGY 2 ○ PGY 3 ○ PGY 4 ○ PGY 5 ○ Other, specify: _____

1. **Please shade the response that best describes the factors, that influence the way you care for patients and document the care that you provide:**

	1= No Importance	2= Little Importance	3 =Moderate Importance	4 = Major Importance
a. Education through formal lectures	○	○	○	○
b. Education throught rounding with clinical experts	○	○	○	○
c. Education through reading journal articles	○	○	○	○
d. Having access to pocket notecards as reminders	○	○	○	○
e. Access to patient education material that you may give to your patients	○	○	○	○
f. CIS Order sets	○	○	○	○
g. CIS Note templates	○	○	○	○
h. Working with a mentor	○	○	○	○
i. Attending multidisciplinary rounds	○	○	○	○
j. Clinical experience	○	○	○	○

2. **Please shade the response that corresponds best to your beliefs in managing patients with pain:**

	1 = Do Not Agree	2= Unsure	3 = Agree Somewhat	4=Very Much Agree
a. Patients are typically reluctant to report the pain they are in	○	○	○	○
b. Patients are typically reluctant to take pain medications	○	○	○	○
c. Practitioners are reluctant to give narcotics because of fear of patient addiction	○	○	○	○
d. Practitioners in general are not very knowledgeable in pain management	○	○	○	○
e. The hospital lacks the latest/up to date methods for managing pain	○	○	○	○
f. Standard measurement tools can be used to assess patients' level of pain	○	○	○	○
g. Patients who are given narcotics are at significant risk for respiratory depression	○	○	○	○
h. Patients who are given narcotics are at significant risk for constipation	○	○	○	○
i. Patients who are given narcotics are at significant risk for addiction	○	○	○	○
j. Patients of different cultures may be more or less reluctant to report the pain they are in	○	○	○	○
k. Female patients are more likely to complain of pain than are male patients	○	○	○	○
l. Female practitioners are more likely to be responsive to patients' pain complaints	○	○	○	○

5772227440

Nurses' Pain Knowledge & Attitude Survey

Shade Circles Like This--> ●
Not Like This--> ⊗ ✓

Age

Sex

Rank/GS Grade

Number of Years in Practice

Area of current clinical practice (choose one only)

- ○ Medical
- ○ Surgical
- ○ Critical Care (ICU)
- ○ ER
- ○ OB/GYN
- ○ Pediatrics
- ○ Psychiatry
- ○ Oncology
- ○ Anesthesia
- ○ Other, specify: _____
- ○ Outpatient, specify: _____

Type of position

- ○ RN
- ○ LPN
- ○ CNS
- ○ Nurse Practitioner
- ○ Technician

Circle the highest level of nursing education completed:

○ AD ○ Diploma ○ BSN ○ MSN/Nursing ○ PhD ○ Other, specify: _____

1. Please shade the response that best describes the factors which influence the way you care for patients and document the care that you provide:

	1= No Importance	2= Little Importance	3 =Moderate Importance	4 = Major Importance
a. Education through formal lectures	○	○	○	○
b. Education throught rounding with clinical experts	○	○	○	○
c. Education through reading journal articles	○	○	○	○
d. Having access to pocket notecards as reminders	○	○	○	○
e. Access to patient education material that you may give to your patients	○	○	○	○
f. CIS Order sets	○	○	○	○
g. CIS Note templates	○	○	○	○
h. Working with a mentor	○	○	○	○
i. Attending rounds with physician	○	○	○	○
j. Clinical experience	○	○	○	○

2. Please shade the response that corresponds best to your beliefs in managing patients with pain:

	1 = Do Not Agree	2= Unsure	3 = Agree Somewhat	4=Very Much Agree
a. Patients are typically reluctant to report the pain they are in	○	○	○	○
b. Patients are typically reluctant to take pain medications	○	○	○	○
c. Practitioners are reluctant to give narcotics because of fear of patient addiction	○	○	○	○
d. Practitioners in general are not very knowledgeable in pain management	○	○	○	○
e. The hospital lacks the latest/up to date methods for managing pain	●	●	●	●
f. Standard measurement tools can be used to assess patients' level of pain	○	○	○	○
g. Patients who are given narcotics are at significant risk for respiratory depression	○	○	○	○
h. Patients who are given narcotics are at significant risk for constipation	○	○	○	○
Patients who are given narcotics are at significant risk for addiction	○	○	○	○
j. Patients of different cultures may be more or less reluctant to report the pain they are in	○	●	●	●
k. Female patients are more likely to complain of pain than are male patients	●	●	●	●
l. Female practitioners are more likely to be responsive to patients' pain complaints	○	○	●	○

5133227441

True/False - Circle the correct answer

T F 1. Observable changes in vital signs must be relied upon to verify a patient's statement that he or she has severe pain.

T F 2. Patients can sleep in spite of severe pain

T F 3. Psychological dependence on narcotics very frequently results from legitimate prescriptions

T F 4. Analgesics are more effective when administered PRN rather than around-the-clock.

T F 5. If a patient's pain is relieved by administration of a placebo, the pain is not real.

T F 6. Beyond a certain dose, increases in the dose of an opioid (narcotic) analgesic, such as morphine, will not increase pain relief.

T F 7. Increasing requests for analgesics typically indicate unrelieved pain

T F 8. Increasing request for analgesics typically indicate tolerance to the analgesic.

T F 9. Pain intensity is best rated by the clinician and not the patient.

T F 10. Tylenol #3 (Codeine 30 mg + acetaminophen 300 mg) is equal to approximately one sixth of a dose of 75 mg IM meperidine (Demerol)

T F 11. When switching from a parenteral route to an oral route, the dose of a narcotic will need to be decreased.

T F 12. I would be extremely concerned about possible addiction if a member of my family were given morphine for chronic pain.

T F 13. If the patient can be distracted from the pain, he or she does not have as high an intensity as he or she reports.

T F 14. Children less than 11 years of age cannot report pain with reliability. Therefore one should rely on the parents' assessment of the child's pain intensity.

T F 15. Non-pharmacological treatments (e.g. ice, heat, music, imagery, etc.) are often helpful for severe pain.

T F 16. The World Health Organization (WHO) pain ladder suggests single analgesic agents rather than combining classes of drugs (e.g., combining an opoid with a tricyclic antidepressant).

T F 17. For a patient who is experiencing pain secondary to cancer metastasis to bone, it would be prudent to increase his/her dose of narcotics before considering prescribing aspirin or other nonsteroidal anti-inflammatory medications (NSAIDS) as these are typically not helpful.

Circle the best response:

18. Which of the following medications has a metabolite which is toxic to the central nervous system?

Hydromorphone (Dilaudid) Oxycodone Meperidine (Demerol) Methadone (Dolophine)

19. What percentage of patients who use opiods (narcotics) for pain relief for 3-6 months are likely to develop addiction?

<1% 5% 25% 50% 75% 100%

Appendix O
Patient Survey for Pain Management

Pain Management Patient Questionnaire

Shade Circles Like This--> ●
Not Like This--> ⊗ ✓

1. Have you experienced any pain in the past 24 hours?

Y ○ N ○

If you answered "no" to question No. 1, please stop now, If you answered "yes," complete the rest of the questionnaire.

	No pain										*Worst pain possible*
2. On this scale, how much pain are you having right now?	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○
3. On this scale, please indicate the worst pain you have had in the past 24 hours?	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○
4. On this scale, please indicate the average (usual) level of pain you have had in the past 24 hours.	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○

---

5. Shade in the reponse of the number that describes how, during the past 24 hours, pain has interfered with your:	*Does not interfere*										*Completely interferes*
	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○
A. General activity											
B. Other activities that are needed to recover from surgery, such as turning, coughing, deep breathing, physical therapy	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○
C. Walking ability	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○
D. Sleep	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	10 ○

---

6. Early in your care, did a physician or nurse make it clear to you that the treatement of pain is very important and that you should be sure to tell them when you have pain?

Y ○ N ○

a. If you answered yes, what was your comfort goal? _____

b. ___ I do not know

Please make a checkmark at the best response.

7. Select the phrase that indicates how satisfied or dissatisfied you are with the way your nurses responded to your reports of pain.

__ (1) Very dissatisfied
__ (2) Dissatisfied
__ (3) Slightly dissatisfied
__ (4) Slightly satisfied
__ (5) Satisfied
__ (6) Very satisfied

8. Select the phrase that indicates how satisfied or dissatisfied you are with the way your physicians responded to your reports of pain.

__ (1) Very dissatisfied
__ (2) Dissatisfied
__ (3) Slightly dissatisfied
__ (4) Slightly satisfied
__ (5) Satisfied
__ (6) Very satisfied

9. If you were not satisfied with your pain treatment in any way, please explain why.

10. When asked for pain medication, what was the longest time you had to wait to get it?

__ (1) < 0 minutes
__ (2) 10-20 minutes
__ (3) 20-30 minutes
__ (4) 30-60 minutes
__ (5) >60 minutes
__ (6) Asked for medication but never received it
__ (7) Never asked for pain medication

11. Please select your ward.

__ Ward 40 Cardiac Care Unit
__ Ward 41 Cardiology
__ Ward 45A Surgical ICU
__ Ward 45B Medical Intensive Care Unit/Pediatric Intensive Care Unit
__ Ward 45C Intermediate Intensive Care Unit
__ Ward 46 Cardiovascular Stepdown
__ Ward 71 Hematology Oncology
__ Ward 72 Executive Ward
__ Ward 75 General Medicine
__ Ward 51 General Pediatrics
__ Ward 57 Orthopedics
__ Ward 58 Neurosurgery
__ Ward 65 Urology
__ Ward 68 General Surgery

Appendix P

OVERVIEW

Pain is the most common reason why individuals seek medical care.

Unrelieved pain can negatively affect your physical functioning and your state of mind. These negative effects include some or all of the following:

- Decreased mobility
- Impaired sleep
- Poor eating/nutrition
- Decreased concentration
- Anxiety/Distress
- Depression
- Strained social interactions

Pain may also lead to further medical complications related to:

- Nausea & Vomiting
- Elevated blood pressure
- Impaired lung function
- Impaired digestive function
- Increased metabolic rate
- Impaired ability to fight infection
- Delayed healing

WHAT IS PAIN MANAGEMENT?

The term *pain management* refers to a comprehensive evaluation of the source of your pain and establishment of an appropriate treatment plan for the control of both pain and suffering.

A good pain management program requires teamwork. Doctors, nurses, pharmacists, social workers, therapists, psychiatrists, chaplains, patients and family members can all play a part.

PATIENT'S RIGHTS AND RESPONSIBILITIES

As a patient at WRAMC, you can expect:

- Information about pain and pain relief
- A concerned staff committed to pain prevention and management
- Health professionals who respond quickly to reports of pain
- Health professionals who believe your reports of pain
- State-of-the-art pain management

As a patient at WRAMC, we expect that you will:

- Ask your doctor or nurse what to expect regarding pain and pain management
- Discuss pain relief options with your doctor and nurse
- Work with your doctor and nurse to develop a pain management plan
- Ask for pain relief when pain first begins
- Help your doctor and nurse assess your pain
- Tell your doctor or nurse if your pain is not relieved
- Tell your doctor or nurse about any worries you have about taking pain medication

WALTER REED ARMY MEDICAL CENTER

Pain Management
Patient Information Brochure

Walter Reed Army Medical Center is committed to assessing your pain and treating it appropriately. Just because you have a medical problem does not mean you have to suffer. Many options exist to help manage your pain. You and your family need to be part of the team to treat your pain effectively.

This brochure has been written to provide you with the information you need to be an active partner in your pain management.

PAIN ASSESSMENT & MEASUREMENT

Pain Intensity

Just as it is important to have your pulse and blood pressure measured, it is equally important to have your level of pain checked regularly.

Everyone experiences pain differently. Only you that can describe the amount of pain you have.

In order to help your medical team treat your pain best, you will be asked to quantify your pain by using this simple **0-10** scale:

If this scale is confusing to you or any member of your family, please ask someone from your medical team to help explain it to you.

Individuals who are unable to use this scale, such as children or those who are too confused, will still be assessed for pain and treated appropriately. In these situations, family members as well as medical experts may be called upon to help.

Pain Location & Description

In order to best treat your pain, your medical team may ask you some for some more information concerning your pain. These questions may include the following:

- Where is your pain located?
- Does your pain move to another area of your body?
- How would you describe your pain (sharp, dull, throbbing, aching, burning, etc.)?
- Is your pain always present or does it come and go?
- What makes your pain better?
- What makes your pain worse?
- Do you have trouble sleeping?
- Does your pain limit your ability to perform activities such as standing, walking, bathing, dressing, taking deep breaths, etc.?
- Does your pain limit your ability to participate in the therapy you are receiving?

SETTING COMFORT GOALS

It is important that you and your medical team help establish a "comfort goal". This is a pain intensity level from **0-10**, which will allow you maximum pain relief, while preserving your function.

Certainly a goal at WRAMC is to have everyone with zero pain. Unfortunately, depending on the underlying causes, this may not be possible. Therefore a goal must be established.

Example: SGT Smith recently had a knee operation. He can expect some discomfort, but when his pain is 5 or greater he is unable to participate in his physical therapy. Therefore a reasonable comfort goal would be a pain rating of 3 or 4.

TREATMENT OPTIONS

Today, many modern medications, procedures and treatments are available to maximize your pain relief. They may be used separately or in combination with one another.

Medications

Opioids or *Narcotics* are some of the most common and effective medications used for severe pain. Patients are often hesitant about using these medications for fear of addiction. Addiction is extremely rare when narcotics are used appropriately. If you have any concerns about addiction, you should discuss them with your doctor or nurse.

Other pain-relief medications include:

- Corticosteroids
- Non-Steroidal Anti-inflammatory medications (NSAID's)
- Antidepressant medications
- Anticonvulsant/Seizure medications

Potential side effects include:

- Nausea
- Constipation
- Sedation
- Urinary retention
- Dry mouth
- Blood thinning

Non-Medication Treatments

Ice and *heat* may both be effective in relieving pain. These, however, should be used with caution in individuals with poor sensation or circulation.

Deep breathing exercises, visual imagery and self-relaxation techniques are also very effective ways of managing pain. There are experts at WRAMC that can help you develop these skills.

The proponent agency of this publication is the office of the Director, Performance Improvement/Risk Management Office. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, Walter Reed Army Medical Center, ATTN: MCHL-MAO-PI, 6900 Georgia Avenue, NW, Washington, DC, 20307-5001.

FOR THE COMMANDER:

OFFICIAL:

JAMES R. GREENWOOD
Colonel, MS
Deputy Commander for
Administration

ERIK J. GLOVER
Major, MS
Executive Officer

DISTRIBUTION:
F